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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,366	08/29/2001	Klaus-Peter Harth	GP-300473	7763

7590 10/16/2003

CARY W. BROOKS
General Motors Corporation
Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

WILLS, MONIQUE M

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,366

Applicant(s)

HARTH, KLAUS-PETER

Examiner

Wills M Monique

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 23 and 24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-15, 18 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-4, 16, 17, 19, 20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 23-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method of operating a fuel cell system, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.

Information Disclosure Statement

The information disclosure statement(s) filed April 18, 2002 has/have been received and complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 .

Priority

German foreign priority document(s) 100 47 138.2, filed April 18, 2001 and submitted under 35 U.S.C. 119(a)-(d), has/have been received and placed of record in the file.

Claim Objections

Claims 15 objected to because of the following informalities: each claim lacks antecedent basis for "housing" and "plates" (claims 5 & 21) and air guide housing (claim 15). Appropriate correction is required.

Allowable Subject Matter

Claims 5-14, 18 & 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 6 would be allowable over the prior art of record, because the prior art is silent to a fuel cell system comprising an air guiding housing arranged downstream of a heat exchanger and directly adjacent the heat exchanger.

Claim 7 would be allowable over the prior art of record, because the prior art is silent to a fuel cell system comprising an air branching device with adjustable plates, wherein in a first position the plates permit air to move through a heat exchanger and in a second position said plates close to supply air to a duct leading to fuel cells.

Claim 5 would be allowable over the prior art of record, because the prior art is silent to a fuel cell system comprising a heat exchanger being connected to a fan by a housing.

The remaining claims are allowable based on their dependency to claims 5, 6 & 7.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3,16,17 & 20 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lance U.S. Patent 4,517,259.

Lance teaches an air motor drive system for fuel cell power plants (abstract). The system drives a turbine which, in turn powers a circulating fan (col. 2, lines 35-40). The system includes an air branching assembly, including air motor controlled by a valve that adjusts the bleed air, which can which can be used for multiple cooling functions. The airflow can be returned to a compressor inlet, used in some other portion of the fuel cell plant or vented to the atmosphere through a plant-cooling tower. Therefore, performing multiple cooling tasks. The air motor is located within a fuel cell circulating air duct. See column 2, lines 35-50. An oxygen bearing gas such as air flows through the circulation duct 10 to a fuel cell (col. 3, lines 1-5). The circulating fan may be used to cool the heat exchanger (col. 1, lines 50-55). Therefore, the instant claims are anticipated by Lance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lance U.S. Patent 4,5167,259.

Lance teaches an air motor drive system for fuel cell power plants (abstract). The system is drives a turbine which, in turn powers a circulating fane (col. 2, lines 35-40). The system includes an air branching assembly, including air motor controlled by a valve that adjusts the bleed air which can which can be used for multiple cooling functions. The air flow can be returned to a compressor inlet, used in some other portion of the fuel cell plant or vented to the atmosphere through a plant cooling tower. The air motor is located within a fuel cell circulating air duct. See column 2, lines 35-50. An oxygen gas such as air flows through the circulation duct 10 to a fuel cell (col. 3, lines 1-5). The circulating fan may be used to cool the heat exchanger (col. 1, lines 50-55).

The reference does not expressly disclose a fan upstream from a heat exchanger.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse the order of the heat exchanger and the fan since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Conclusions

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (703) 305-0073. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

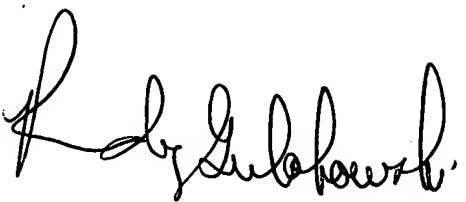
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Randy Gulakowski, may be reached at 703-308-4333.

The unofficial fax number is (703) 305-3599. The Official fax number for non-final amendments is 703-872-9310. The Official fax number for after final amendments is 703-872-9311.

Mw

09/15/03


RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700